

## **3.6 Oregon Coast Region**

### **3.6.1 Overview**

The Oregon Coast region has long had a significant involvement in the Alaska groundfish fishery, from the development of the joint venture foreign fishery through the present. One of the most visible aspects of this participation is the fleet of catcher vessels based in Oregon that participate in a variety of fisheries across the various Alaskan regions.

For the purposes of this analysis, the Oregon Coast region is defined as the area encompassed by Tillamook County, Lincoln County, and Clatsop County as shown on Figure 3.6-1. This area includes those ports and communities with the most direct ties to the Alaskan groundfish fishery. Specifically, the Oregon Coast region was defined based on the concentration of vessels whose owners are significant and active participants in the fisheries of the North Pacific. These vessel owners are concentrated in the North Oregon Coast from Newport (Lincoln County) to Astoria (Clatsop County). Tillamook County, situated between Lincoln and Clatsop counties, is included so that a contiguous region is defined.

Figure 3.6-1. Oregon Coast Study Region



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Ports in this area are important for local fisheries as well as the distant water Alaskan fisheries. Most of the fish landed in Oregon are delivered to Astoria or Newport (Radtke and Davis 1998b), the county seats of Clatsop and Lincoln Counties, respectively. Coos Bay had historically been an important Oregon port for fish landings, but has been decreasing in relation to the other two, primarily because of the lack of a whiting fishery in the Coos Bay area (Radtke and Davis 1998a). Onshore facilities to process whiting are concentrated in Newport.

### **3.6.2 Regional Economy**

The data on employment from 1975 through 1999 is presented in Table 3.6-1 indicates that the Oregon Coast region economy is relatively diversified and relies heavily on the service, retail, and government sectors. Fish and timber are also significant components of the multi-industry “agriculture, forestry, fishing, and other” and “manufacturing” categories.

**Table 3.6-1. Total Employment for Oregon Coast Region, 1975–1999**

Sector	No. of Persons Employed by Year					
	1975	1980	1985	1990	1995	1999
Agricultural Services, Forestry, Fishing, and Other	1,234	3,418	3,256	2,608	2076a	2,612
Construction	1,192	2,039	1,874	2,310	2,899	3,618
Federal, Civilian	534	564	507	611	517	564
Finance, Insurance, and Real Estate	2,026	2,819	2,268	2,449	3,098	3,841
Manufacturing	6,164	7,255	6,426	6,375	6,280	6,005
Military	1,022	986	877	892	892	794
Mining	76a	95a	151a	91a	31a	29a
Retail Trade	6,498	8,472	8,588	11,209	13,015	13,252
Service	6,216	8,484	10,161	12,205	14,590	16,971
State and Local	5,290	5,616	5,762	6,301	6,794	7,127
Transportation and Public Utilities	1,428	1,557	1,651	1,560	1,657	1,707
Wholesale Trade	390a	417a	652	881	701a	683a

Note: Where “a” appears in the table, the data is suppressed due to confidentiality reasons, or because there were fewer than ten jobs in that sector during the year indicated. Where an “a” follows a numerical value, one or more of the underlying statistical areas faced disclosure or other limitations. Although the data do not appear in the table, the totals shown in the summary table reflect all available information, which might include estimates of employment and income for unusually small sectors.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System (REIS), 1969-1999. Personal income and employment estimates for all counties and metropolitan areas in the United States.

Table 3.6-2 below presents earnings information for the same economic categories and shows the same general pattern. Manufacturing, as measured by earnings, is similar in magnitude to the sectors mentioned above (retail trade, service, government); but as an aggregated category, it is not clear how much of this is due to fish-related activity. It is almost certain that none of this manufacturing activity is related to Alaskan groundfish (see Oregon processing sector discussion below).

**Table 3.6-2. Total Non-farm Earnings for Oregon Coast Region, 1975–1999**

Sector	Earnings by Year (\$Millions)					
	1975	1980	1985	1990	1995	1999
Agricultural Services, Forestry, Fishing, and Other	8.6	26.1	28.8	45.1	29.9a	40.0
Construction	16.3	37.3	33.0	59.4	69.4	102.8
Federal, Civilian	7.9	13.1	16.4	21.7	25.0	30.6
Finance, Insurance, and Real Estate	6.3	14.2	11.1	21.5	39.3	55.2
Manufacturing	80.9	149.2	165.5	199.1	201.7	218.4
Military	8.5	12.7	16.4	17.3	22.5	23.0
Mining	1.0a	2.7a	3.9	1.6a	a	a
Retail Trade	42.8	75.7	95.2	139.8	178.0	206.4
Service	38.2	79.4	113.3	177.7	248.5	329.9
State and Local	47.6	80.8	110.8	153.9	209.5	244.2
Transportation and Public Utilities	23.5	32.6	38.0	42.5	53.0	58.0
Wholesale Trade	4.8a	6.5a	11.5	18.3	15.9a	18.6a

Note: Where “a” appears in the table, the data is suppressed due to confidentiality reasons, or because there were fewer than ten jobs in that sector during the year indicated. Where an “a” follows a numerical value, one or more of the underlying statistical areas faced disclosure or other limitations. Although the data do not appear in the table, the totals shown in the summary table reflect all available information, which might include estimates of employment and income for unusually small sectors.

Source: REIS, 1969-1999. Personal income and employment estimates for all counties and metropolitan areas in the United States.

Personal income information, as presented in Table 3.6-3 below, suggests that the region is similar in this regard to other regions. Gross population numbers for the region are also provided, along with employment numbers.

**Table 3.6-3. Personal Income, Population, Per Capita Income, and Total Employment for the Oregon Coast Region, 1975–1999**

Indicator	Indicator Data by Year					
	1975	1980	1985	1990	1995	1999
Personal Income (\$Millions)	437.7	853.2	1,126.0	1,535.5	1,986.6	2,388.0
Population (No. of Persons)	76,666	89,215	89,453	94,151	103,150	104,728
Per Capita Personal Income (\$)	\$5,709	\$9,564	\$12,588	\$16,309	\$19,260	\$22,802
Total Full- and Part-Time Employment (No. of Persons)	33,770	43,745	43,831	49,194	54,953	59,008

Personal income includes nonfarm and farm income (adjusted for social insurance and residence) plus dividends, interest, rent, and transfer payments.

Source: REIS, 1969-1999. Personal income and employment estimates for all counties and metropolitan areas in the United States.

### 3.6.3 Links to the Alaskan Groundfish Fishery

Links between Oregon and the Alaskan groundfish fisheries fall primarily into three areas – processing, secondary processing and distribution, and harvesting. Each of these is considered in this section.

#### Inshore Groundfish Processing

Table 3.6-4 displays information on regional processing employment. Table 3.6-5 provides information on regional processing payments to labor.

The Oregon region does not have shoreplants within the region that process Alaska groundfish. While in earlier years, there was some regional employment associated with at-sea processing sectors, in more recent years there has been virtually no groundfish related employment or payments to labor related to Alaska groundfish processing.

**Table 3.6-4. Groundfish Processing FTE Employment on At-Sea Processors Owned by Residents or Shore-Based Processors in the Oregon Coast Region, 1992-2000**

Year	Processing FTE Employment in the Region													Total
	ST-CP	FT-CP	HT-CP	P-CP	L-CP	BSP-SP	APA-SP	K-SP	SC-SP	SE-SP	MS	FLT	OTHER	
1992b	0.00	0.00	32.20	0.00	13.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.25
1993b	0.00	0.00	32.20	a	13.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	45.25
1994b	0.00	0.00	41.22	0.00	11.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.79
1995b	0.00	0.00	32.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.67
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00

Note: All employment on at-sea processors (including floaters) and administrative employment at all processors are assigned to the owners region. On-site employment at shore plants are assigned to the region in which the plant is located.

For all sectors, additional payments to labor for administrative and office personnel are assigned to the owners region.

a Added to Floaters to ensure confidentiality.

b In order to protect confidentiality, all at-sea and administrative payments to labor for this year reflect averages for the sectors are not adjusted to reflect regional differences.

Source: Estimated by Northern Economics

**Table 3.6-5. Adjusted Groundfish Processing Payments to Labor for Shoreside Processors in the Region and for At-sea Processors Owned by Residents of the Oregon Coast Region, 1992-2000**

Year	\$Millions													Total
	ST-CP	FT-CP	HT-CP	P-CP	L-CP	BSP-SP	APA-SP	K-SP	SC-SP	SE-SP	MS	FLT	OTHER	
1992b	0.00	0.00	2.00	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.69
1993b	0.00	0.00	2.20	a	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	2.77
1994b	0.00	0.00	2.49	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.11
1995b	0.00	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.19
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00

Note: All payments to labor from at-sea processors (including floating inshore plants) are assigned to the owners region. On-site payments to labor from shore plants are assigned to the region in which the plant is located.

For all sectors, additional payments to labor for administrative and office personnel are assigned to the owners region.

a Added to Floating Inshore Processors to ensure confidentiality.

b Due to confidentiality restrictions, all values for this year reflect averages for the processor classes and are not adjusted to reflect regional differences.

Source: Estimated by Northern Economics

**Processing Ownership**

Table 3.6-6 provides a summary of processor ownership by sector for the Oregon Coast region. As shown, there has been no ownership of Alaskan groundfish processing capacity since 1995.

**Table 3.6-6. Number of Processors Owned by Residents of the Oregon Coast Region, 1992-2001**

Year	Number of Processors													Total
	ST-CP	FT-CP	HT-CP	P-CP	L-CP	BSP-SP	APA-SP	K-SP	SC-SP	SE-SP	MS	FLT	OTHER	
1992	0	0	1	0	1	0	0	0	0	0	0	0	0	2
1993	0	0	1	0	1	0	0	0	0	0	0	0	0	2
1994	0	0	1	0	1	0	0	0	0	0	0	0	0	2
1995	0	0	1	0	0	0	0	0	0	0	0	0	1	2
1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: NMFS Blend Data, June 2001.

The following group of four tables provides more detailed information on a species break-out basis for regionally owned processors. Table 3.6-7 provides information on the number of regionally owned processors by species by year. Table 3.6-8 provides information on the volume of fish, by species, processed at these plants. Table 3.6-9 displays information on the wholesale production value by species at these plants. Table 3.6-10 provides information on adjusted processing revenues, by sector, for regionally owned processors.

As shown, from 1992 to 1995 Oregon region owned processors did run all major species of groundfish, although volumes and values cannot be disclosed due to confidentiality concerns. Ownership in the 1992-1995 era was limited to the HT-CP and L-CP sector classes, and using sector averaged values to protect confidentiality, adjusted processing revenues can be estimated at \$5.5 million to \$7.8 million per year during that time period.

**Table 3.6-7. Number of Processors Owned by Residents of the Oregon Coast Region, by Groundfish Species, 1992-2000**

Year	Number of Processors				
	ARSO	FLAT	PCOD	PLCK	Total
1992	2	2	2	2	2
1993	2	2	2	2	2
1994	2	2	2	2	2
1995	2	2	2	1	2
1996	0	0	0	0	0
1997	0	0	0	0	0
1998	0	0	0	0	0
1999	0	0	0	0	0
2000	0	0	0	0	0

Source: NMFS Blend Data, 2001

**Table 3.6-8. Round Weight Tons Processed at Processors Owned by Residents of the Oregon Coast Region, by Groundfish Species, 1992-2000**

Year	Thousands of Tons				
	ARSO	FLAT	PCOD	PLCK	Total
1992	a	a	a	a	a
1993	a	a	a	a	a
1994	a	a	a	a	a
1995	a	a	a	a	a
1996	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00

Note: Values include "Ghost" processors.

Source: NMFS Blend and WPR Data, June 2001

a Data omitted for confidentiality.

**Table 3.6-9. Wholesale Production Value for Processors Owned by Residents of the Oregon Coast Region by Species, 1992-2000**

Year	\$Millions				
	ARSO	FLAT	PCOD	PLCK	Total
1992	a	a	a	a	a
1993	a	a	a	a	a
1994	a	a	a	a	a
1995	a	a	a	a	a
1996	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00

Source: NMFS Weekly Production Reports, June 2001

Note: Values include "Ghost" processors.

a Data omitted for confidentiality.

**Table 3.6-10. Adjusted Groundfish Processing Revenues at Processors Owned by Residents of the Oregon Coast Region, 1992-2000**

Year	\$Millions													
	ST-CP	FT-CP	HT-CP	P-CP	L-CP	BSP-SP	APA-SP	K-SP	SC-SP	SE-SP	MS	FLT	OTHER	Total
1992b	0.00	0.00	4.99	0.00	1.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.72
1993b	0.00	0.00	5.50	a	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	6.92
1994b	0.00	0.00	6.22	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.79
1995b	0.00	0.00	5.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	5.48
1996	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	a	0.00

a Added to Floating Inshore Processors to ensure confidentiality.

b Due to confidentiality restrictions, all values for this year reflect averages for the processor classes and are not adjusted to reflect regional differences.

Source: Estimated by Northern Economics

As for other locally based processing, Radtke and Davis 1999b detail the Oregon processing sector in 1997, which is the most current systematic information available. Ownership and overall sector organization have, of course, changed somewhat since then. Their summary noted five main dynamics affecting the development of the Oregon processing sector and its future:

- the collapse of the salmon industry in the Pacific Northwest (Washington, Oregon, California);

- the expansion of the Pacific whiting industry;
- the overall consolidation of the seafood processing industry;
- reductions in groundfish resources and efforts to improve utilization; and
- infrastructure problems (need to improve infrastructure).

These dynamics will not be discussed in any depth, as Radtke and Davis indicate that Oregon processors do not deal with Alaskan product, as has been indicated in the employment discussion above. There are still some indirect linkages to remain aware of during the discussion that follows:

- Many Oregon (and Washington) salmon fishermen also participate in Alaskan salmon fisheries. The decline of Pacific Northwest salmon makes Alaskan salmon fisheries even more important for them if they are to continue fishing, or on the other hand could endanger the continuation of their fishing enterprises.
- The expansion of the Pacific whiting industry has fostered the development of groundfish harvesting and processing in Oregon, especially in Newport. While the processing plants do not use Alaskan fish, some of the boats which fish for whiting also participate in Alaskan groundfish fisheries, and this has perhaps increased the participation of Newport-based boats in these fisheries. It has also given these fishermen experience in harvesting a set TAC under an industry-supervised and managed cooperative system.
- The consolidation of the seafood processing sector has increased the ownership and other organizational linkages between Pacific Northwest and Alaskan processors.
- Groundfish TACs have been reduced in the Pacific Northwest and may well be reduced in Alaskan waters. The dynamics favoring efforts to reduce bycatch and increase effective yield during processing are similar in both cases.
- Not much systematic information is available on secondary processing. While some Oregon Coast secondary processing plants may use some Alaskan groundfish product at times, it is believed that their primary orientation is towards the use of more locally obtained fish.

### **Catcher Vessel Ownership**

Tables 3.6-11 through 3.6-13 provide general descriptive information on regionally owned catcher vessels. Table 3.6-11 shows the number of vessels within the length and gear based sector classes as defined in the sector profiles section (Section 2) of this document. Table 3.6-12 contains information the number of catcher vessels by species group (as an individual vessel typically participates in more than one fishery, the subtotals exceed the total number of regionally owned vessels). Table 3.6-13 provides information on the number of vessels owned within the region based strictly on vessel size (irrespective of gear type).

Oregon Coast region groundfish catcher vessels are dominated by trawl gear vessels, although pot, fixed gear, and longline vessels are also represented. Regional catcher vessels show a broad diversity in species mix. In terms of length classes, there is a distinct clustering of vessels between 60' and 109', with a shift seen upward from the 60' to 70' class to the 80' to 94' class in the mid-1990s.

**Table 3.6-11. Number of Catcher Vessels Owned by Residents of the Oregon Coast Region, 1992-2000**

Year	Number of Vessels										
	TCV BSP ≥ 125	TCV BSP 60-124	TCV Div. AFA	TCV Non-AFA	TCV < 60	PCV	LCV	FGCV 33-59	FGCV ≤ 32	GHOST	Total
1992	1	8	10	4	0	8	2	8	1	2	44
1993	1	3	14	4	0	2	2	7	0	1	34
1994	1	6	11	2	0	5	5	8	0	0	38
1995	1	9	10	4	0	6	4	4	0	0	38
1996	0	10	8	5	0	5	3	5	0	2	38
1997	0	7	11	6	0	5	3	4	0	1	37
1998	0	3	16	6	0	4	2	5	0	2	38
1999	0	4	15	6	0	6	2	6	0	0	39
2000	0	7	11	6	0	10	2	6	0	0	42

Source: CFEC/ADF&G Fish-Ticket and NMFS Observer Data. June, 2001.

**Table 3.6-12. Number of Catcher Vessels Owned by Residents of the Oregon Coast Region by Species, 1992-2000**

Year	Number of Vessels				Total
	ARSO	FLAT	PCOD	PLCK	
1992	32	21	35	26	44
1993	28	17	25	22	34
1994	30	17	24	20	38
1995	35	27	32	25	38
1996	28	18	29	24	38
1997	30	22	30	24	37
1998	32	23	30	27	38
1999	37	29	31	27	39
2000	35	27	35	26	42

Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001

**Table 3.6-13. Number of Catcher Vessels Owned by Residents of the Washington Inland Region, by Vessel Length, 1992-2000**

Year	Number of Vessels											
	29'-32'	33'-39'	40'-44'	45'-49'	50'-54'	55'-59'	60'-79'	80'-94'	95'-109'	110'-124'	125'-139'	Total
1992	1	2	1	5	0	1	16	8	5	4	1	44
1993	1	1	1	4	0	1	13	7	2	3	1	34
1994	0	1	1	5	0	1	13	9	4	3	1	38
1995	0	0	1	2	0	1	13	11	6	3	1	38
1996	0	1	1	1	0	3	10	12	6	4	0	38
1997	0	0	1	1	0	3	9	13	6	2	2	37
1998	0	0	1	1	0	4	8	14	6	3	1	38
1999	0	0	1	0	1	4	8	14	6	4	1	39
2000	0	0	2	0	1	3	8	14	8	4	2	42

Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001

Table 3.6-14 displays information on employment on catcher vessels owned by regional residents, by gear/length class. Table 3.6-15 provides payment to labor information broken out by gear/length class, and Table 3.6-16 provides data on payments to labor on vessels broken out by species group.

Over the years shown, Oregon Coast region vessel employment has spanned all vessel classes, except for the smallest trawl vessel class. In more recent years, there has been no regional employment in the largest trawl vessel class, and the smallest trawl and fixed gear vessel classes. Payments to labor are concentrated among trawl vessels, and both Pacific cod and pollock account for large portions of total payments to labor. As is the case for analogous tables in other regions, this table does not include employment related to participation in distant water fisheries other than Alaska, nor does it include employment related to participation in Oregon fisheries.

**Table 3.6-14. Number of Crewmembers on Catcher Vessels Owned by Resident of the Oregon Coast Region, 1992-2000**

Year	Number of Crewmembers									
	TCV BSP ≥ 125	TCV BSP 60-124	TCV Div. AFA	TCV Non- AFA	TCV < 60	PCV	LCV	FGCV 33-59	FGCV ≤ 32	Total
1992	5	36	45	18	0	44	11	32	4	195
1993	5	14	63	18	0	11	11	28	0	149
1994	5	27	50	9	0	28	17	40	0	174
1995	5	41	45	18	0	33	17	20	0	178
1996	0	45	36	23	0	28	17	20	0	168
1997	0	32	50	27	0	28	17	16	0	168
1998	0	14	72	27	0	22	11	20	0	166
1999	0	18	68	27	0	33	11	24	0	181
2000	0	32	50	27	0	55	11	24	0	198

Source: Estimates developed by Northern Economics based on vessel counts from CFEC/ADF&G Fish-Ticket and NMFS Observer Data.

**Table 3.6-15. Groundfish Payments to Labor on Catcher Vessels Owned by Residents of the Oregon Coast Region, by Sector, 1992-2000**

Year	\$Millions										Total
	TCV BSP ≥ 125	TCV BSP 60-124	TCV Div. AFA	TCV Non-AFA	TCV < 60	PCV	LCV	FGCV 33-59	FGCV ≤ 32	GHOST	
1992	0.70	4.28	3.39	0.35	0.00	0.23	0.07	0.11	0.00	0.00	9.13
1993	0.62	1.13	3.53	0.38	0.00	0.09	0.07	0.13	0.00	0.00	5.96
1994	0.59	2.35	2.22	0.19	0.00	0.20	0.15	0.15	0.00	0.00	5.84
1995	0.72	4.43	2.63	0.45	0.00	0.23	0.40	0.11	0.00	0.00	8.96
1996	0.00	4.25	1.93	0.71	0.00	0.24	0.32	0.14	0.00	0.00	7.59
1997	0.00	3.54	3.20	1.20	0.00	0.28	0.42	0.10	0.00	0.00	8.75
1998	0.00	1.09	4.11	0.72	0.00	0.19	0.15	0.11	0.00	0.00	6.38
1999	0.00	2.14	5.23	1.07	0.00	0.33	0.16	0.18	0.00	0.00	9.11
2000	0.00	4.56	3.29	0.92	0.00	0.47	0.21	0.17	0.00	0.00	9.63

Note: Estimated by multiplying the number of vessels associated with the region by the regionally weighted average payments to labor--using actual value for each region would compromise confidentiality.

Source: Estimated by Northern Economics

**Table 3.6-16. Payments to Labor for Catcher Vessels Owned by Residents of the Oregon Coast Region by Species, 1992-2000**

Year	\$Millions				Total
	ARSO	FLAT	PCOD	PLCK	
1992	0.48	0.23	2.46	5.96	9.13
1993	0.36	0.16	2.06	3.37	5.96
1994	0.33	0.09	1.39	4.04	5.84
1995	0.75	0.23	2.76	5.23	8.96
1996	0.73	0.22	2.63	4.02	7.59
1997	0.62	0.34	3.71	4.06	8.75
1998	0.47	0.20	2.71	3.01	6.38
1999	0.49	0.14	4.09	4.38	9.11
2000	0.67	0.16	3.34	5.46	9.63

Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001

Note: Values for Ghost Vessels have been included in the data set in order to minimize instances where data cannot be reported due to NMFS confidentiality provisions. In all cases the values for Ghost Vessels are negligible.

Tables 3.6-17 and 3.6-18 show the area concentration of effort for Oregon Coast vessels for total groundfish species as well as for Pacific cod and pollock specifically. As shown, the effort shows two primary areas of concentration, the Bering Sea and the Central GOA. This bimodal pattern of geographic distribution of effort holds for Pacific cod as well as pollock.

**Table 3.6-17. Number of Catcher Vessels Owned by Residents of the Oregon Coast Region, by FMP Subarea, 1992-2000**

Year	Number of Vessels					
	AI	BS	WG	CG	EG	Total
1992	1	25	7	30	7	44
1993	2	16	6	25	5	34
1994	1	17	5	23	8	38
1995	2	26	10	27	8	38
1996	5	26	5	25	9	38
1997	2	20	5	23	6	37
1998	2	23	11	25	8	38
1999	1	25	4	24	10	39
2000	1	24	7	23	9	42

Source: CFEC/ADF&amp;G Fish Tickets and NMFS Observer Data, June 2001

**Table 3.6-18. Number of Catcher Vessels Owned by Residents of Oregon Coast Region with Pacific Cod and Pollock Landings by FMP Subarea, 1992-2000**

Year	Number of Vessels												PCOD & PLCK Total
	PCOD						PLCK						
	AI	BS	WG	CG	EG	PCOD Total	AI	BS	WG	CG	EG	PLCK Total	
1992	1	25	5	22	0	35	0	19	5	20	0	26	35
1993	0	16	6	16	1	25	1	14	2	16	1	22	25
1994	0	17	3	10	2	24	0	12	5	15	2	20	24
1995	0	21	5	20	1	32	0	21	7	14	1	25	32
1996	3	23	3	11	3	29	2	21	0	11	1	24	30
1997	1	20	2	16	1	30	1	16	4	13	0	24	30
1998	0	22	10	17	1	30	0	20	8	17	1	27	30
1999	0	24	2	17	1	31	0	20	3	15	1	27	31
2000	0	23	6	18	2	35	0	18	1	14	2	26	35

Source: CFEC/ADF&amp;G Fish Tickets and NMFS Observer Data, June 2001

Table 3.6-19 provides information on the resident catcher vessel fleet in terms of the value of the retained harvest by FMP subarea. Table 3.6-20 details this information of pollock and Pacific cod specifically.

As shown, for Oregon vessels, much more value has come out of the Bering Sea than the Gulf of Alaska over the time period illustrated. The relative worth of the areas and between Pacific cod and pollock, however, has varied somewhat from year-to-year.

**Table 3.6-19. Ex-Vessel Value of Harvest by Catcher Vessels Owned by Residents of the Oregon Coast Region by FMP Subarea, 1992-2000**

Year	\$Millions					
	AI	BS	WG	CG	EG	Total
1992	a	13.40	WG	CG	EG	22.82
1993	a	7.80	0.14	6.70	0.26	14.89
1994	a	8.42	0.11	5.34	0.72	14.60
1995	a	15.63	0.52	5.87	0.39	22.41
1996	0.09	14.18	0.42	4.01	0.28	18.98
1997	a	13.98	0.37	7.25	0.27	21.87
1998	a	8.30	0.40	7.03	0.22	15.94
1999	a	13.16	0.34	9.05	0.22	22.78
2000	a	14.38	0.50	8.86	0.33	24.07

Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001

<sup>a</sup> Combined with value from BS to protect the confidentiality of the small number of CVs from this region that reported catching these species during the year.

**Table 3.6-20. Ex-Vessel Value of Pacific Cod and Pollock Landings by Catcher Vessels Owned by Residents of the Oregon Coast Region by FMP Subarea, 1992-2000**

Year	\$Millions												
	PCOD						PLCK						PCOD & PLCK Total
	AI	BS	WG	CG	EG	PCOD Total	AI	BS	WG	CG	EG	PLCK Total	
1992	a	2.97	0.36	2.83	0.00	6.15	0.00	10.30	0.20	4.41	0.00	14.91	21.06
1993	0.00	3.24	0.04	1.88	b	5.16	a	4.54	b	7.57	b	8.42	13.58
1994	0.00	2.42	b	2.05	b	3.47	0.00	5.95	0.11	4.03	b	10.10	13.57
1995	0.00	4.25	0.06	2.58	b	6.89	0.00	11.04	0.21	1.83	b	13.08	19.97
1996	a	5.22	b	2.28	b	6.58	a	9.01	0.00	1.03	b	10.04	16.62
1997	a	6.14	b	6.23	b	9.29	a	7.83	0.18	2.14	0.00	10.16	19.44
1998	0.00	4.84	0.19	1.74	b	6.76	0.00	3.42	0.08	4.01	b	7.51	14.28
1999	0.00	6.09	b	8.18	b	10.23	0.00	7.00	b	7.62	b	10.96	21.19
2000	0.00	4.77	0.33	3.25	b	8.35	0.00	9.53	b	8.19	b	13.65	22.00

Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001

<sup>a</sup> Combined with value of BS to protect the confidentiality of the small number of CVs in the region that reported catching these species in this subarea during the year.

<sup>b</sup> Combined with value of CG to protect the confidentiality of the small number of CVs in the region that reported catching these species in this subarea during the year.

Table 3.6-21 provides information on value of harvest broken out by gear and length vessel class. Table 3.6-22 provides information on retained catch by regionally owned catcher vessels, by groundfish species. Table 3.6-23 provides parallel value information for these vessels.

As shown, value is concentrated in the mid-range and AFA trawl catcher sectors. On a species volume basis, pollock clearly predominates. In terms of value, Pollock and Pacific cod account for almost all harvest value of groundfish species, and while there is some year-to-year variability, pollock has far outdistanced Pacific cod overall.

**Table 3.6-21. Ex-Vessel Value of Catcher Vessels by Sector from the Oregon Coast Region, 1992-2000**

Year	Value of Catcher Vessels by Sector (\$Millions)										
	TCV BSP ≥ 125	TCV BSP 60-124	TCV Div. AFA	TCV Non- AFA	TCV < 60	PCV	LCV	FGCV 33-59	FGCV ≤ 32	GHOST	Total
1992	1.75	10.69	8.47	0.87	0.00	0.57	0.18	0.29	0.01	0.00	22.82
1993	1.55	2.83	8.82	0.95	0.00	0.23	0.18	0.33	0.00	0.00	14.89
1994	1.48	5.87	5.54	0.47	0.00	0.49	0.38	0.37	0.00	0.00	14.60
1995	1.80	11.07	6.58	1.13	0.00	0.57	1.00	0.26	0.00	0.00	22.41
1996	0.00	10.63	4.82	1.77	0.00	0.60	0.79	0.35	0.00	0.00	18.98
1997	0.00	8.85	7.99	3.00	0.00	0.71	1.05	0.26	0.00	0.00	21.87
1998	0.00	2.73	10.27	1.79	0.00	0.48	0.38	0.28	0.00	0.00	15.94
1999	0.00	5.35	13.06	2.69	0.00	0.82	0.41	0.44	0.00	0.00	22.78
2000	0.00	11.41	8.23	2.30	0.00	1.18	0.52	0.43	0.00	0.00	24.07

Source: CFEC/ADF&G Fish-Ticket and NMFS Observer Data, June, 2001.

Note: Ex-vessel values shown reflect the adjusted average earned by each class multiplied by the number of vessels owned by residents of the region. Regional adjustment factors were employed to account for relative productivity differences among regions.

**Table 3.6-22. Retained Tons of Groundfish by Catcher Vessels Owned by Residents of the Oregon Coast Region by Species, 1992-2000**

Year	Thousands of Tons				
	ARSO	FLAT	PCOD	PLCK	Total
1992	0.5	1.9	14.2	57.1	73.6
1993	0.4	1.3	15.4	55.2	72.4
1994	0.3	0.7	11.1	60.7	72.8
1995	0.6	2.7	18.0	62.9	84.2
1996	1.6	1.4	18.8	56.8	78.6
1997	1.4	3.1	24.1	44.4	73.0
1998	1.9	2.0	19.8	52.6	76.3
1999	1.5	1.7	18.5	53.0	74.7
2000	2.4	2.2	12.7	55.4	72.6

Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001

Note: Values for Ghost Vessels have been included in the data set in order to minimize instances where data cannot be reported due to NMFS confidentiality provisions. In all cases the values for Ghost Vessels are negligible.

**Table 3.6-23. Ex-Vessel Value of Harvest by Catcher Vessels Owned by Residents of the Oregon Coast Region, 1992-2000**

Year	\$Millions				
	ARSO	FLAT	PCOD	PLCK	Total
1992	1.19	0.57	6.15	14.91	22.82
1993	0.90	0.41	5.16	8.42	14.89
1994	0.82	0.22	3.47	10.10	14.60
1995	1.87	0.57	6.89	13.08	22.41
1996	1.81	0.54	6.58	10.04	18.98
1997	1.56	0.86	9.29	10.16	21.87
1998	1.16	0.50	6.76	7.51	15.94
1999	1.24	0.35	10.23	10.96	22.78
2000	1.68	0.39	8.35	13.65	24.07

Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001

Table 3.6-24 below ranks Oregon Coast region communities based on measures of participation in the Alaskan groundfish fishery of catcher vessels owned by the residents of each community. As shown, Newport clearly dominates the region in terms of number of vessels (44 percent of the regional total) and total value of harvest (fully two-thirds of the total for the entire region). Astoria and Warrenton, which are sometimes lumped as the “Astoria port group” (Radtke and Davis 1999a) together own 24 percent of the participating vessels that, in turn, account for 10 percent of the total regional harvest value. Seal Rock, Depoe Bay, Siletz, and South Beach are also considered in some analyses as part of a “Newport port group” (Radtke and Davis 1999a). If these communities are lumped with Newport, the resulting “Newport port group” accounts for 59 percent of the participating vessels and 83 percent of the regional harvest value total. No other community or “port group” in the region accounts for more than 6 percent of regionally owned vessels or 2 percent of total value landed by regionally owned vessels.

**Table 3.6-24. Community Rankings by Alaska Groundfish Catcher Vessels Owned by Residents of the Oregon Coast Region, 1992-2000**

City	Total Value a	No. of Vessels
	Percent of Region Total	
Newport	65.7	43.8
South Beach	5.5	2.5
Astoria	5.3	10.0
Warrenton	5.1	13.8
Depoe Bay	4.8	2.5
Siletz	4.2	5.0
Seal Rock	2.4	5.0
Seaside	2.0	6.3
Hammond	1.8	5.0
Pacific City	1.3	1.3
Cloverdale	0.8	1.3
Garibaldi	0.8	1.3
Lincoln City	0.1	1.3
Tillamook	0.1	1.3

Note: Communities are ranked based on each community's percent of the historical total value for the region.

a Total value percentage for each community is based on average revenue of each catcher vessel by type and adjusted using regional-adjustment factor.

Source: Calculated by Northern Economics using CFEC/ADF&G Fish Ticket Data, July 2001

### Harvest Diversity

Table 3.6-25 provides information on the relative value of groundfish and non-groundfish species (salmon, crab, halibut, other) to regionally owned catcher vessels for the years 1999 and 2000. In addition to showing annual totals, this information is presented on a monthly basis to show the 'annual round' of the fisheries, and to allow a consideration of the changing relative importance of the different species complexes during different times of the year. Figures 3.6-2 and 3.6-3 illustrate these same data. Table 3.6-26 provides a summary break-out of the relative value of non-groundfish species on an annual basis for the period 1992-2000. This provides an easy comparison of the relative worth to owners of these species. Table 3.6-27 and Figure 3.6-4 provide a count of regionally owned groundfish vessels participating in the non-groundfish fisheries by species for 1992-2000. As individual vessels typically participate in more than one fishery, the subtotals exceed the total number of regionally owned vessels.

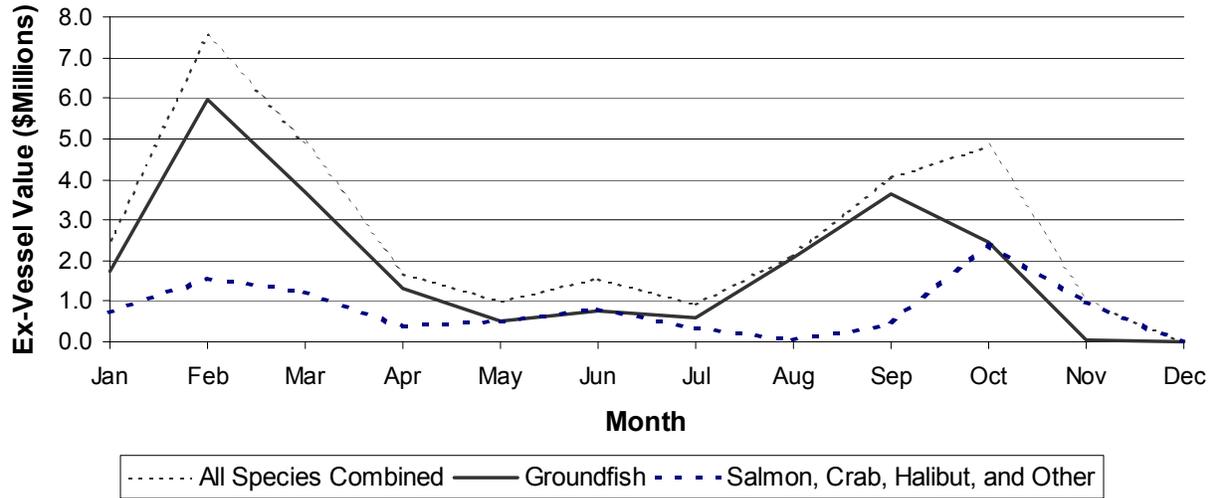
For the Oregon Coast region in 1999, groundfish accounted for 71 percent of value for these vessels. Crab comprised 17 percent, halibut 11 percent, and other non-groundfish zero percent of total 1999 value. (2000 data are problematic because halibut is missing from the data set.) In most years crab is more important than halibut to these vessels, and salmon and other non-groundfish are relatively unimportant. More vessels participate in the halibut fishery than all others for the years shown.

**Table 3.6-25. Ex-Vessel Harvest Value of Groundfish, Salmon, Crab, Halibut, and Other Species by Residents of the Oregon Coast Region, by Month, 1999-2000**

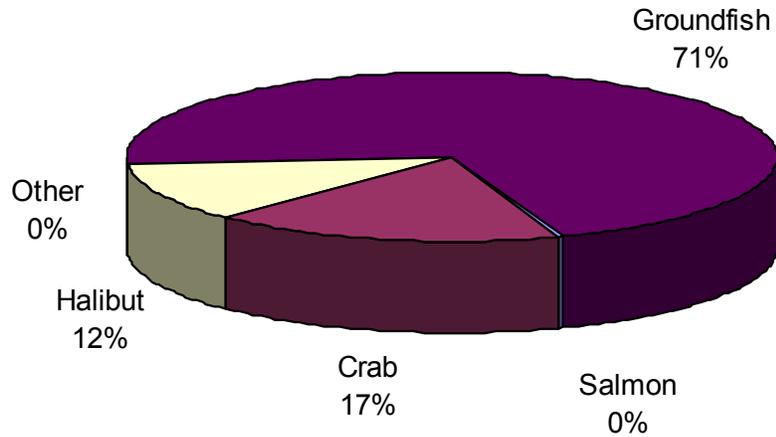
Year	Species	\$Millions												Total
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1999	Salmon	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.06
	Crab	0.74	1.56	0.94	0.00	0.00	0.00	0.00	0.00	0.00	2.39	0.00	0.00	5.62
	Halibut	0.00	0.00	0.29	0.38	0.50	0.77	0.33	0.03	0.43	0.01	0.96	0.00	3.71
	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Groundfish	1.74	5.97	3.66	1.33	0.50	0.78	0.58	2.08	3.66	2.44	0.04	0.00	22.78
2000	Salmon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crab	0.00	0.00	0.00	2.64	0.00	0.00	0.00	0.02	0.02	1.47	0.00	0.00	4.16
	Halibut	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Groundfish	2.57	6.64	4.44	1.64	0.34	0.29	2.24	1.72	2.35	1.81	0.04	0.00	24.07

Source: CFEC/ADF&G Fish Tickets from NPFMC, July 2001

**Figure 3.6-2. Ex-Vessel Harvest Value of Groundfish, Salmon, Crab, Halibut, and Other Species by Residents of the Oregon Coast Region, 1999**



Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001.

**Figure 3.6-3. Percent of Total Ex-Vessel Harvest Value by Residents of the Oregon Coast Region, 1999**

Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001.

**Table 3.6-26. Ex-Vessel Value of Non-Groundfish Harvested by Groundfish Vessels Owned by Residents of the Oregon Coast Region, by Species, 1992-2000**

Year	\$Millions				Total
	Salmon	Crab	Halibut	Other	
1992	a	7.29	1.29	a	8.59
1993	0.26	4.20	0.95	a	5.41
1994	a	4.98	1.69	a	6.67
1995	a	5.41	2.41	a	7.82
1996	a	2.99	3.11	a	6.10
1997	a	3.69	4.08	a	7.77
1998	0.13	4.24	2.04	0.00	6.41
1999	a	5.62	3.77	0.00	9.39
2000	a	4.16	0.00	0.00	4.16

Source: CFEC/ADF&G Fish Tickets from NPFMC, July 2001

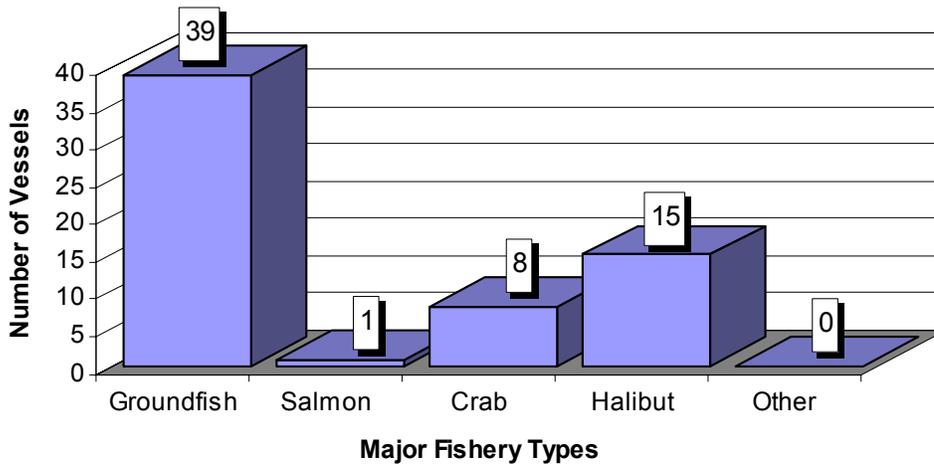
<sup>a</sup> Combined with value for halibut to protect the confidentiality of the small number of CVs from this region that reported catching these species during the year.

**Table 3.6-27. Number of Groundfish Vessels Owned by Residents of the Oregon Coast Region Participating in Non-Groundfish Fisheries, by Species, 1992-2000**

Year	Number of Vessels				
	Salmon	Crab	Halibut	Other	Total
1992	3	16	22	3	29
1993	4	9	15	3	21
1994	3	10	21	2	24
1995	1	9	16	1	20
1996	3	6	19	2	22
1997	1	8	16	1	20
1998	6	7	16	0	23
1999	1	8	15	0	19
2000	1	13	0	0	14

Source: CFEC/ADF&G Fish Tickets from NPFMC, July 2001

**Figure 3.6-4. Number of Groundfish Vessels Owned by Residents of the Oregon Coast Region Participating in Non-Groundfish Fisheries, by Species, 1999**



Source: CFEC/ADF&G Fish Tickets and NMFS Observer Data, June 2001.

### 3.6.4 Important Groundfish Communities

Radtke and Davis (1998a, 1998b, 1999a, 1999b) will be the main sources for the discussion that follows. Their overall description of the Oregon commercial fishing industry (1998a) indicates that for the state as a whole, fisheries income comprises only about 0.3 to 0.4 percent of all personal income, or about 0.5 to 0.6 percent of all earned income. For all coastal Oregon communities, fisheries income comprises about 5.2 percent of income from all sources, or 9.7 percent of earned income. For Coos Bay, the percentages are 2.1 and 3.9, for Astoria 8.8 and 14.7, and for Newport 10.6 and 20.4.

Using ex-vessel values, Radtke and Davis (1999a) conclude that Alaskan fisheries account for about 80 percent of the total revenues of Oregon boats participating in those fisheries. They then characterize those vessels into three groups. About 22 percent of Oregon boat owners live in the Astoria port area and are mostly gillnetters who have historically fished the Columbia River for salmon and now also participate in Bristol Bay and Young's Bay salmon fisheries. The Woodburn area has the second highest number of fishermen who fish in Alaska and have Oregon addresses, and the fishermen tend to be salmon purse seiners and halibut fishermen. Newport has about 12 percent of such addresses, but generates about 46 percent of the state's distant water fishery revenue, and participates primarily in groundfish fisheries. A fourth "miscellaneous" category is for boats from all over Oregon that are multi-species pot and longline boats (black cod, halibut, groundfish, and crab). Radtke and Davis estimate that the total economic impact of distant water fisheries on the Oregon economy was \$88.7 million in personal income. Of this, \$67.6 million was from Alaskan onshore and \$1.9 million from Alaskan offshore fisheries. Other Pacific waters fisheries accounted for \$1.3 million, and \$17.8 million were from unknown areas (owners and/or crew with Oregon addresses, but no harvest records can be located for the vessel – bad data). Distant water fleet also generated \$28.1 million from Oregon onshore and west coast offshore fisheries, for a total of \$116.7 million. The rest of the Oregon fleet (fishing and landing Oregon fish) generated about \$200 million.

Using numbers from Radtke and Davis 1998a, Table 3.6-28 presents the same data in terms of personal income (rather than ex-vessel value). The time series is longer, so that some trends may be more obvious, but the overall results are the same. Half of Newport's fisheries derived income comes from distant water fisheries, while only 20 percent of Astoria's does. Newport accounts for well over half (and as much as two-thirds) of the region's and state's earnings from the distant water fisheries, most of which is derived from Alaskan waters. Astoria accounts for perhaps 20 percent. Newport boats participate primarily in groundfish fisheries in Alaskan waters (although, of course, some boats do participate in other fisheries). Astoria boats tend to participate more in Alaskan salmon fisheries. Furthermore, Newport has been increasing its share of local Oregon fisheries as well, while Astoria has been stable or declining a bit. This probably reflects the increase in whiting harvest and processing in Newport and Newport's groundfish orientation (as well as the problems with Pacific Northwest salmon fisheries).

**Table 3.6-28. Personal Income Derived From Community Fleet Participation in Oregon Coast Region and Distant Water Fisheries**

Year	Astoria/Columbia River			Newport			Coastal Communities			State of Oregon			Astoria/Columbia R. Area		Newport	
	OR + Dis	Dis	Dis %	OR + Dis	Dis	Dis %	OR + Dis	Dis	Dis %	OR + Dis	Dis	Dis %	% CC only	% CC Dis only	% CC only	% CC Dis only
1986	92.4	22.5	24%	82.1	45.5	55%	239.4	77.6	32%	343.2	110.6	32%	43%	29%	23%	59%
1987	124.6	20.5	16%	107.3	46.6	43%	337.5	78.9	23%	434.4	101.8	23%	40%	26%	23%	59%
1988	109.7	22.7	21%	100.8	45.3	45%	313.1	83.1	27%	400.2	95.6	24%	38%	27%	24%	55%
1989	84	12	14%	96.6	47.5	49%	303.2	74.2	24%	318.3	90.6	28%	31%	16%	21%	64%
1990	74	23.1	31%	94.2	63.9	68%	243.2	97	40%	305.2	116.8	38%	35%	24%	21%	66%
1991	51.7	14.2	27%	68.4	39.9	58%	167	62.7	38%	229.6	78.8	34%	36%	23%	27%	64%
1992	57.6	14.8	26%	91.7	41.9	46%	213.1	65.2	31%	254.6	76.2	30%	29%	23%	34%	64%
1993	56.1	14.6	26%	75.2	40.5	54%	180.9	63.2	35%	217.1	74.7	34%	35%	23%	29%	64%
1994	54.7	14.5	27%	83.7	42.8	51%	189.4	65.3	34%	225.3	79.1	35%	32%	22%	33%	66%
1995	62.9	14	22%	95.5	49.1	51%	208.5	71.1	34%	259.2	81.8	32%	36%	20%	34%	69%
1996	73.2	14.5	20%	98.5	47.6	48%	229.5	69.7	30%	281.4	80.9	29%	37%	21%	32%	68%
1997	68.4	14.2	21%	92.6	46.9	51%	207.5	68.5	33%	252	78.9	31%	39%	21%	33%	68%

Source: Derived from Radtke and Davis 1998a, Tables 4 and 5

“OR+Dis” = fisheries derived personal income for Oregon-owned vessels from Oregon caught, landed, and processed fish AND from distant water fisheries

“Dis” = ONLY fisheries derived personal income for Oregon-owned vessels from distant water (non-Oregon) fisheries

“Dis %” =  $((\text{Dis}/(\text{OR}+\text{Dis})) \times 100$

“% CC only” = places “OR+Dis” as a percentage of “Coastal Communities” “OR+Dis”

“% CC Dis only” = places “Dis” as a percentage of “Coastal Communities” “Dis”

“Dis” is shorthand for “Distant Water Fisheries”

“OR” is shorthand for “Oregon fisheries”